

I. AMENDMENTS TO THE CLAIMS

Please cancel claims 33 to 35, without prejudice or disclaimer.

Please amend claims 21, 22, 23, 26, 30, 31, 32 and 36 by deleting the stricken material and inserting the underlined material as follows:

21. (Twice Amended) A method for detection and differentiation of pathogenic enterobacteria in a sample, said method comprising:

isolating nucleic acid from said sample;

adding a set of oligonucleotide primer pairs to said isolated sample, wherein said set of oligonucleotide primers comprises at least five oligonucleotide primer pairs, wherein at least one primer pair is capable of specifically amplifying a DNA sequence to produce an amplified product of a virulence factor/toxin gene characteristic for each one of an enterotoxigenic, enteroaggregative, enteroinvasive, enteropathogenic uenterohemorrhagic pathogenic E. coli strains; and

wherein at least one of set is the primer pair EI-1: 5' TTT CTG GAT GGT ATG GTG AGG 3' (SEQ ID NO: 9) and EI-2: 5' CTT GAA CAT AAG GAA ATA AAC 3' (SEQ ID NO: 10), which specifically hybridizes to the inv-plasmid; and

subjecting said sample and said set of primer pairs to an amplification process; and detecting the presence of at least one amplified product, wherein the presence of at least one amplified product indicates the presence of at least one pathogenic enterobacteria strain in said sample.

22. (Amended) The method according to claim 21, wherein the set of oligonucleotide primer pairs comprises primer pairs selected from the group consisting of:

U.S.N.: 09/403,690
Attorney Docket No: 20239-0706-US
Client Docket No: BN 25 PCT-US